

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 6, 13, 20, 34, and 42 as indicated below.

1. (Currently Amended) A network bus comprising:

a notch filter in communication with a coaxial cable, said coaxial cable routed in a tree configuration to a plurality of locations of a building, said notch filter comprising a first port in communication with an external source, said notch filter configured to filter out one or more bands of a portion of video signals received on said first port from an external source that are carried by said coaxial cable, wherein said notch filter further comprising a second port is further configured to receive via said coaxial cable, transmissions from a local area network of computers within said building, said transmissions occurring at one or more frequencies within said filtered out ~~portion~~bands of video signals such that said transmissions from said local area network occur at one or more frequencies as said filtered out bands of video signals, and wherein said notch filter receives at said second port said transmissions over said coaxial cable within said building and allows said transmissions within said building while filtering further filters~~said transmissions from being sent from said local area network to said external source; and~~

a frequency converter, in communication with said coaxial cable, configured to receive signals ~~from said tree configuration~~transmissions from said local area network of computers at at least a first frequency and to forward send said signals within said tree configuration to said local area network of computers at at least a second frequency, wherein said first and second frequencies are within said filtered out ~~portion~~bands of video signals such that said local area network of computers can send and receive signals within said filtered out band of video signals on said coaxial cable in communication of said second port of said notch filter while said notch filter blocks said transmissions on said local area network from exiting said building.

2. (Original) The network bus of Claim 1, wherein said frequency converter is configured to forward said signals via said coaxial cable.

3. (Original) The network bus of Claim 2, wherein said building comprises a residential building.

4. (Original) The network bus of Claim 1, wherein said video signals are delivered to said coaxial cable from a headend equipment of a community antenna television system.

5. (Original) The network bus of Claim 1, wherein said filtered out portion comprises a frequency range from approximately 50MHz to approximately 750MHz.

6. (Currently Amended) A local area computer network comprising:

a notch filter comprising a first port configured to receive a signal from a cable television transmission system and to filter out at least one portion of said signal in the range of approximately 50 MHz to approximately 750 MHz to produce a filtered signal;

a community antenna television wire configured to receive said filtered signal and routed in a tree configuration to a plurality of locations of a residence, said wire in communication with a second port of said notch filter;

a plurality of computers in communication with said wire, each of said computers having a modem configured to receive and transmit broadband signals between said computers within said tree configuration;

wherein said computers are configured to send and receive communications between different ones of said computers via said modems by modulating a carrier having a frequency within said filtered out portion and wherein said notch filter receives said communications between said different ones of said computers at said second port and allows said communications to occur while filtering through said second port ~~further filters~~ said communications between said computers from being transmitted out of said residence.

7. (Previously Presented) The local area network of Claim 6, wherein said computers are configured to send said upstream signals to said cable television transmission system using a carrier frequency in the range of approximately 0 MHz to approximately 50 MHz.

8. (Previously Presented) The local area network of Claim 7, wherein said modems are configured to receive a signal at a first frequency and to transmit said signal at a second frequency, wherein said first and second frequencies are within said filtered out portion.

9. (Original) The local area network of Claim 8, further comprising a frequency converter configured to convert signals from said first frequency to said second frequency.

10. (Original) The local area network of Claim 9, wherein at least some of said computers are configured to receive digital data from the Internet via said wire.

11. (Original) The local area network of Claim 9, wherein at least some of said computers are configured to receive FM audio signals via said wire.

12. (Original) The local area network of Claim 9, wherein at least one of said computers is configured to receive signals from said transmission system using a carrier frequency in the range of approximately 0 MHz to approximately 50 MHz.

13. (Currently Amended) A method of making a local area network, the method comprising:

routing community antenna television wiring in a tree configuration to different parts of a structure;

coupling a notch filter comprising a first port to said wiring for filtering out one or more bands of frequencies associated with one or more television broadcasts delivered to said wiring by a service drop of a community antenna television distribution system;

coupling to said wiring-notch filter via a second port a plurality of computing devices; and

configuring at least some of said computing devices for two-way communication with others of said computing devices, wherein the two-way communication is connected to said second port of said notch filter and occurs carried at least in part over said wiring at at least one frequency within said filtered out bands of television broadcasts such that said computing devices can send and receive signals within said filtered out bands of television broadcasts while connected to said second port and wherein said notch filter allows said transmissions over said wiring within said structure while filtering further filters said communications between said computing devices from being transmitted out of said structure.

14. (Original) The method of Claim 13, wherein each of at least some of said computing devices comprises a receiver configured to receive video signals from said headend transmission equipment, a transmitter for forwarding signals to said headend transmission equipment, and a modem configured to receive and transmit broadband signals between said computing devices.

15. (Original) The method of Claim 13, wherein said computing devices comprise a computer and a microprocessor controlled appliance.

16. (Original) The method of Claim 15, wherein said computing devices comprise an alarm system.

17. (Original) The method of Claim 13, wherein said filtered out television broadcasts comprise a portion of the frequency range between approximately 50 MHz to 750 MHz.

18. (Original) The method of according to any of Claims 14-17, wherein said structure comprises a residential building.

19. (Original) The method of Claim 13, wherein at least some of said computing devices transmit communications at a first frequency and receive communications at a second frequency, wherein said first and second frequency are within said filtered out television broadcasts.

20. (Currently Amended) A method of networking computing devices, the method comprising:

coupling a notch filter comprising a first port to coaxial wiring carrying television signals, wherein the coaxial wiring is routed in a tree configuration to a plurality of locations in a building;

filtering out a frequency band comprising a portion of said television signals with the notch filter; and

establishing two-way communications between at least two computing devices within the building and connected via the tree configuration, wherein said two-way communications are coupled to a second port of said notch filter, wherein said communications are carried at least in part over said coaxial wiring utilizing said filtered out frequency band such that said computing devices can send and receive signals within said filtered out frequency band on said coaxial wiring while coupled to said second port, and wherein said notch filter allows said transmissions over said coaxial wiring within said building while filtering further filters—said communications between said computing devices from being transmitted out of said building.

21. (Original) The method of Claim 20, wherein said building comprises a residential building.

22. (Original) The method of Claim 21, wherein said residential building comprises a plurality of rooms of a residence.

23. (Original) The method of Claim 22, wherein said television signals are delivered to said building via a service drop of a community antenna television system.

24. (Original) The method of Claim 20, wherein said frequency band spans the range from approximately 50MHz to approximately 750MHz.

25. (Original) The method of Claim 23, further comprising blocking at least some of said communications from being transmitted outside said local area network via said service drop.

26. (Original) The method of Claim 20, wherein at least some of said computing devices transmit said communications at a first frequency and receive said communications at a second frequency, wherein said first and second frequencies are in said frequency band.

27. (Original) The method of Claim 26, further comprising providing a frequency converter configured to receive said communications at said first frequency and to forward said communications at said second frequency.

28. (Original) The method of Claim 20, wherein one of the computing devices sends a communication to another of the computing devices at a first frequency, and wherein said another computing device receives said communication at a second frequency.

29. (Original) The method of Claim 23, wherein said computing devices comprise a network computer.

30. (Original) The method of Claim 23, wherein said computing devices comprise a microprocessor controlled appliance.

31. (Previously Presented) The method of Claim 23, wherein said computing devices comprises an alarm system.

32. (Original) The method of Claim 20, wherein said computing devices comprise a network computer and a microprocessor controlled appliance.

33. (Original) The method of Claim 23, wherein said computing devices comprise a network computer, a microprocessor controlled appliance, and an alarm system.

34. (Currently Amended) A network device comprising:

a receiver for receiving a television signal from a community antenna television system;

a transmitter for transmitting signals to a headend equipment of said community antenna television system;

a notch filter in communication with said television signal via a first port, said notch filter configured to block at least one stop frequency band within the received television signal; and

a modem in communication with a second port of said notch filter, said modem configured to receive and transmit broadband signals between computing devices within the at least one stop band and wherein the notch filter is configured to allow transmission of said broadband signals between said computing devices while blocking blocks—the transmission of said broadband signals between said computing devices from being sent to the headend equipment at least within the at least one stop band.

35. (Original) The network device of Claim 34, wherein said modem is configured to receive signals at a first frequency and to transmit said signals at a second frequency.

36. (Original) The network device of Claim 34, wherein said receiver is configured to receive digital data from the Internet.

37. (Original) The network device of Claim 34, wherein said receiver is configured to receive FM audio signals.

38. (Original) The network device of Claim 34, wherein said receiver is configured to receive signals in the range of approximately 50 to 750 MHz.

39. (Original) The network device of Claim 34, wherein said network device comprises a microprocessor controlled appliance.

40. (Original) The network device of Claim 34, wherein said network device comprises a computer.

41. (Original) The network device of Claim 34, wherein said computing devices comprise a microprocessor controlled appliance and an alarm system.

42. (Currently Amended) A method of communicating data between computing devices comprising:

receiving a television signal from a headend transmission equipment of a cable television transmission system;

filtering out with a notch filter connected vi a first port to said television signal to filter a portion of said television signal in the range of approximately 50 MHz to approximately 750 MHz to produce a filtered signal;

coupling said filtered signal to unlooped cable television wiring that is in communication with a second port of said notch filter;

coupling a plurality of computing devices to said cable television wiring, wherein each of at least some of said computing devices comprises a modem configured to receive and transmit broadband signals between said computing devices;

establishing communications, at least in part over said cable television wiring, between different ones of said computing devices via said modem using at least one frequency within said filtered out portion; and

allowing said communications over said cable television wiring between said different ones of said computing devices while filtering with said notch filter said communications between said computing devices so as to prevent transmission of said communications to said headend transmission equipment.

43. (Original) The method of Claim 42, wherein each of at least some of said computing devices comprises a receiver configured to receive signals from said headend transmission equipment and a transmitter for forwarding signals to said headend transmission equipment.

44. (Original) The method of Claim 42, further comprising forwarding a signal from at least one of said computing devices to said transmission system using a frequency in the range of approximately 0 MHz to approximately 50 MHz.

45. (Original) The method of Claim 42, wherein said wiring is routed in a tree configuration to a plurality of different locations of a residential building.

46. (Original) The method of Claim 42, wherein said wiring comprises coaxial cable.

47. (Original) The method of Claim 42, wherein said computing devices comprise a network computer.

48. (Original) The method of Claim 42, wherein said modem is configured to receive communications at a first frequency and to send communications at a second frequency.

49. (Previously Presented) The method of Claim 42, further comprising coupling a frequency converter to said wiring, wherein said frequency converter receives a communication at a first frequency and forwards said communication at a second frequency within said filtered out portion.

50. (Original) The method of Claim 42, wherein said computing devices comprise a personal computer.

51. (Original) The method of Claim 50, wherein said computing devices comprise a microprocessor controlled appliance.